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| 09/807,445 | 05/23/2001 | Martin Vogel | P20684 | 6733 |

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Brinks Hofer Gilson & Lione
P.O. Box 10395
Chicago, IL 60610

| EXAMINER | |
|---|---|
| SHAPIRO, LEONID | |
| ART UNIT | PAPER NUMBER |
| 2673 | |

DATE MAILED: 12/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/807,445 | VOGEL ET AL. | |
| | Examiner | Art Unit | |
| | Leonid Shapiro | 2673 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *25 June 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *11-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 June 2004* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the newly introduced limitation of claims 11 and 25: " wherein the at least two operating elements are movable from a first of the at least two fields to a second of at least two fields on the screen " must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The newly introduced limitation of claims 11 and 25: " wherein the at least two operating elements are movable from a first of the at least two fields to a second of at least two fields on the screen and the at least two operating elements are capable of adjusting the values displayed in the first of the at least two fields **only** when positioned adjacent to the first of the at least two fields, and capable of adjusting the second of the at least fields **only** when positioned adjacent to the second of the at least two fields ".

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 25, 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eastty et al. (US patent No. 6,359,632 B1) in view of LeBrat et al. (US Patent No. 5,339,166) and Silfast et al. (US Patent No. 6,438,241 B1).

As to claim 25, Eastty et al. teaches an audio signal processing apparatus comprising:

an operating surface (See Fig. 1, items 10, 30, in description See Col. 2, Lines 15-27) with at least two operating elements structured and arranged to set values related to at least one of a configuration for the processing audio signals and parameters (GAIN, DELAY in the Eastty et al. reference) for the processing of the audio signals (See Figs. 1,6A, items 20,50,GAIN, DELAY, in description See Col. 2, Lines 15-26 and from Col. 3, Line 52 to Col. 4, Line 23);

at least one screen comprising at least two fields structured and arranged to display set values of at least two operating elements (See Figs. 6A-6B, items GAIN, PAN, in description See from Col. 3, Line 52 to Col. 4, Line 23); a computer coupled to at least two operating elements and to at least one screen, structured and arranged to acquire set values and transmit set values to at least one screen for display (See Fig. 1, 6A, items 20, 30, GAIN, in description See Col. 2, Lines 19-26 and Col. 3, Lines 1-7); a signal processor coupled to computer, wherein computer transmits set values to signal processor to adjust the processing of the audio signals by signal processor (See Fig. 1, items 20, 50, in description See Col. 2, Lines 19-26).

Eastty et al. does not show algorithm library coupled to computer and signal processor.

LeBrat et al. teaches the algorithm library connected to the computer (See Fig. 7, steps 1001-1016, in description See Col. 22, Lines 44-57).

It would have been obvious to one of ordinary skill in the art at the time of invention to add the algorithm library as shown by LeBrat et al. in Eastty et al. apparatus

in order to provide variety of extensions to the existing functions (See Col. 1, Lines 8-11 in the LeBrat et al. reference).

Eastty et al. and LeBrat et al. do not show wherein the at least two operating elements are movable from a first of the at least two fields to a second of at least two fields on the screen and the at least two operating elements are capable of adjusting the values displayed in the first of the at least two fields **only** when positioned adjacent to the first of the at least two fields, and capable of adjusting the second of the at least fields **only** when positioned adjacent to the second of the at least two fields.

Silfvast et al. teaches the at least two operating elements are movable from a first of the at least two fields to a second of at least two fields on the screen (in the reference is equivalent to reassigning items 62, in Fig. 2 by the control processor (See Fig. 7, items 500, 501) as shown in Figs. 8A, 10A) (See Figs 2, 8A, 10A, items 62, AUX, PAN, Col. 6, Lines 31-36) and the at least two operating elements are capable of adjusting the values displayed in the first of the at least two fields **only** when positioned adjacent to the first of the at least two fields, and capable of adjusting the second of the at least fields **only** when positioned adjacent to the second of the at least two fields (See Fig. 2, items 58, 64, Col. 6, Lines 16-44).

It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate teaching of Silfvast et al. into Eastty et al. and LeBrat et al. system in order to provide an improved technology for use at large scale recording and mixing installations (See See Col. 5, Lines 10-13 in Silfvast et al. reference).

As to claims 27-28, Eastty et al. teaches one of operating elements is structured and arranged to define a configuration for the processing of the audio signals and adjust a value of at least one selected parameter without changing configuration (See Figs. 1, 6A, items 20, 50, in description See Col. 2, Lines 19-26 and from Col. 3, Line 52 to Col. 4, Line 24).

As to claim 29-30, Eastty et al. teaches computer is structured and arranged to acquire states of at least two elements via signals in at least two fields of screen and display these states on screen (See Fig. 1, 6B, items 20, 50, in description See Col. 3, Lines 1-6 and from Col. 3, Line 52 to Col. 4, Line 23).

4. Claims 11-16,19-24, rejected under 35 U.S.C. 103(a) as being unpatentable over Eastty et al. in view of Bergman et al. (US Patent No. 5,859,631) and Silfvast et al.

As to claim 11, Eastty et al. teaches a device for setting values for processing of audio signals, with a signal processor (See Fig. 1, item 50, in description See Col. 2, Lines 15-18); at least two elements structured and arranged (See Fig. 6A, items GAIN, DELAY, in description See from Col. 3, Line 52 to Col. 4, Line 23); a screen connected with the signal processor for displaying the values, screen comprising at least two fields, (See Figs. 6A-6B, items GAIN, PAN, in description See from Col. 3, Line 52 to Col. 4, Line 23); a computer coupled to at least two elements via connections in front of the screen, computer being structured and arranged to acquire the adjusted values and to display acquired value on at least two fields of screen (See Fig. 1, 6A, items 20, 30, GAIN, in description See Col. 2, Lines 19-26 and Col. 3, Lines 1-7); computer being coupled to signal processor for processing of audio signals and

structured and arranged to transmit control commands to signal processor for processing the audio signals according to the of manually adjusted values established by at least two elements (See Fig. 1, items 20, 50, in description See Col. 2, Lines 19-26).

Eastty et al. does not show a carrier for accommodating at least two elements, carrier being located relative to a viewing direction of the screen, in the front of screen.

Bergman et al. teaches a carrier for at least two elements being located, relative to a viewing direction of the screen, in the front of screen (See Fig. 1, items 4,8,10, in description See from Col. 2, Line 65 to Col. 3, Line31).

It would have been obvious to one of ordinary skill in the art at the time of invention to implement a carrier as shown by Bergman et al. in the Eastty et al. apparatus in order to provide front panel having additional mechanical user interface that is simple to alter (See Col. 1, Lines 39-41 in the Bergman et al. reference).

Eastty et al. and Bergman do not show the simultaneous adjustment of at least two values displayed on the screen, and wherein the at least two operating elements are movable from a first of the at least two fields to a second of at least two fields on the screen and the at least two operating elements are capable of adjusting the values displayed in the first of the at least two fields **only** when positioned adjacent to the first of the at least two fields, and capable of adjusting the second of the at least fields **only** when positioned adjacent to the second of the at least two fields.

Silfvast et al. teaches the simultaneous adjustment of at least two values displayed on the screen (in the reference two regions 13 and 14 of Figure 1 used by two hands of the operator, sitting close to the middle region 11) (See Fig. 1, items 10-11, 13-14, from Col. 5, Line 55 to Col. 6, Lines 15), and the at least two operating elements are movable from a first of the at least two fields to a second of at least two fields on the screen (in the reference is equivalent to reassigning items 62, in Fig. 2 by the control processor (See Fig. 7, items 500, 501) as shown in Figs. 8A, 10A) (See Figs 2, 8A, 10A, items 62, AUX, PAN, Col. 6, Lines 31-36) and the at least two operating elements are capable of adjusting the values displayed in the first of the at least two fields **only** when positioned adjacent to the first of the at least two fields, and capable of adjusting the second of the at least fields **only** when positioned adjacent to the second of the at least two fields (See Fig. 2, items 58, 64, Col. 6, Lines 16-44).

It would have been obvious to one of ordinary skill in the art at the time of invention to incorporate teaching of Silfvast et al. into Eastty et al. and LeBrat et al. system in order to provide an improved technology for use at large scale recording and mixing installations (See Col. 5, Lines 10-13 in Silfvast et al. reference).

As to claim 12, Eastty et al. teaches set values the of manually adjusted values depend upon position of at least two elements (See Fig. 6A, items GAIN, DELAY, in description See from Col. 3, Line 52 to Col. 4, Line 23).

As to claim 13, Bergman et al. teaches carrier includes transparent regions assigned to at least two elements (See Fig. 1, items 4, in description See from Col. 2, Line 64 to Co. 3, Line 1).

As to claim 14, Eastty et al. teaches computer determines a configuration for the processing of the audio signals in the signal processor (See Fig. 1, items 20, 50, in description See Col. 2, Lines 19-26).

As to claim 15, Bergman et al. teaches a device for mounting electronic components is positioned between carrier and screen (See fig. 1, items 4,6,8,10).

As to claim 16, Bergman et al. teaches a device for mounting electronic components is positioned between carrier and screen (See fig. 1, items 4,6,8,10, in description See from Col. 2, Line 64 to Co. 3, Line 31).

As to claim 19, Eastty et al. teaches computer is structured and arranged to determine a configuration of the device by detecting positions of at least two elements (See Fig. 1, 6B, items 20, 50, in description See Col. 3, Lines 1-6 and from Col. 3, Line 52 to Col. 4, Line 23).

As to claim 20, Eastty et al. teaches additional elements which are different (See Fig. 1, 6B, items 20, 50, in description See Col. 3, Lines 1-6 and from Col. 3, Line 52 to Col. 4, Line 23).

As to claims 21-22, 24, Eastty et al. teaches computer is structured and arranged to acquire states of at least two elements via signals in at least two fields of screen and display these states on screen (See Fig. 1, 6B, items 20, 50, in description See Col. 3, Lines 1-6 and from Col. 3, Line 52 to Col. 4, Line 23).

As to claim 23, Eastty et al. teaches at least one element which is an operating element structured and arranged for configuring an audio mixer (See Fig. 1, in description See Col. 1, Lines 15-18).

5. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eastty et al., Bergman et al. and Silfvast et al. as aforementioned in claim 11 in view of Silfvast (US Patent No. 5,959,610).

Eastty et al., Bergman et al. and Silfvast et al. do not show at least one shaft encoder.

Silfvast teaches a shaft encoder in computer-mirrored panel input device (See Figs. 3, 5A, items 25,27,29, in description See from Col. 2, Line 64 to Col. 3, Line 10 and Col. 5, Lines 23-24).

It would have been obvious to one of ordinary skill in the art at the time of invention to implement a shaft encoder as shown Silfvast in the Eastty et al., Bergman et al. and Silfvast et al. apparatus in order to provide front panel having additional mechanical user interface that is simple to alter.

6. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eastty et al., Bergman et al. and Silfvast et al. as aforementioned in claim 11 in view of Jaeger (US Patent No. 5,786,811).

Eastty et al., Bergman et al. and Silfvast et al. do not show at least one linearly adjustable transmitter.

Jaeger teaches a linearly adjustable transmitter (See Figs. 36-38, items 246-249, in description See from Col. 21, Line 60 to Col. 23, Line 26).

It would have been obvious to one of ordinary skill in the art at the time of invention to implement a linearly adjustable transmitter as shown Jaeger in the Eastty et al., Bergman et al. and Silfvast et al. apparatus in order to provide front panel having additional mechanical user interface that is simple to alter (See Col. 1, Lines 39-41 in the Bergman et al. reference).

***Response to Amendment***

7. Applicant's arguments filed on 06-25-04 have been considered but are moot in view of the new ground(s) of rejection.

***Telephone inquire***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonid Shapiro whose telephone number is 703-305-5661. The examiner can normally be reached on 8 a.m. to 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 703-305-4938. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ls 11.24.04

VIJAY SHANKAR
PRIMARY EXAMINER